

SPERGULA SATIVA IN CONNECTICUT.

M. L. FERNALD.

DR. C. B. GRAVES has sent to the Gray Herbarium a specimen of *Spergula sativa*, Boenn., collected in a cultivated field at New London, Connecticut, June 11, 1903. So far as I am aware this is the first occurrence of the plant in the United States although it is superficially so near the commonly established *S. arvensis*, L., that it has possibly escaped detection. In fact, the plant collected at Ottawa, Canada, in July, 1892, by Mr. J. Fletcher and distributed as *S. arvensis* (no. 115) in Halsted's American Weeds is very characteristic *S. sativa*.

In Europe there are several closely related species of *Spergula* differing in seed characters and geographic ranges; and since the status of *S. arvensis* and *S. sativa* has been very fully discussed by certain European authors it is well here to review the results of these studies. For some time the two plants, one with the seeds more or less covered with white papillae, the other with seeds quite without papillae, were not distinguished. In 1824, however, Boenninghausen¹ divided the so-called *S. arvensis* into two species, *S. sativa* with smooth seeds, and *S. vulgaris* with papillose seeds. These two plants have been regarded sometimes as species, sometimes as varieties; and by many continental and some British botanists the smooth-seeded plant was long supposed to be the true Linnean *S. arvensis*.

This view was still current in 1880, when Mr. George Nicholson² called attention to the occurrence of the two plants in Britain, and showed that the papillose seeded plant (*Spergula vulgaris*, Boenn.) was of broad distribution over continental Europe, though rare in the British Isles, and that it was the only species established in America. *S. sativa*, according to Mr. Nicholson, is a more northern plant, common in Britain and Scandinavia, but less common in central and southern Europe. This northern plant, *S. sativa*, "has minutely punctulate, margined seeds, and in a living state can be distinguished by its decidedly viscous, dull grey-green leaves and branches; on the other hand, in *S. vulgaris* the seeds are obscurely margined, or totally

¹Prodr. Fl. Monast. 135 (1824).

²Journ. Bot. xviii. 16-19 (1880).

devoid of wing, and beset with club-shaped papillae, generally quite black in fully-matured seeds. When growing the latter is conspicuous on account of its light grass-green leaves, altogether brighter-looking and less viscid than the former plant.”¹

In 1891, Mr. G. Claridge Druce,² the discriminating curator of the Fielding Herbarium at Oxford, showed that in the Linnean Herbarium “the only specimen labelled *S. arvensis* is quite typical *S. vulgaris* Boenn., as is the specimen in *Hort. Cliff.* The Morisonian plant is also *S. vulgaris.*” Thus, from Mr. Druce’s studies, there is no question that the papillose-seeded plant, now so commonly established in America, is the true *S. arvensis* of Linnaeus. Mr. Druce reiterates the statement of distribution previously made by Mr. Nicholson and in regard to the viscid character of *S. sativa* says further: “The difference in the relative viscosity of *S. sativa* and *S. vulgaris* was strongly impressed upon my mind in September last, when I found *S. sativa* (accompanied with *S. vulgaris*) for the first time in Berks in a sandy field on Boars Hill, near Oxford, growing with many plants of *Senecio Jacobaea*. It was a singular fact that plants of *S. sativa* might be picked out from those of *S. vulgaris* [*S. arvensis*], from their being more or less covered with the pappus of the *Senecio* which in its wind-driven progress across the field became attached to *S. sativa*, but which the less viscid foliage of *S. vulgaris* [*S. arvensis*] did not retain.” Later, in 1897, Mr. Druce said “The flowers of *S. sativa* have a valerianaceous odor which I have not noticed in *S. vulgaris* [*S. arvensis*], but I by no means assert that it is not present in the latter.”³

The appearance in Connecticut and formerly at Ottawa of the smooth-seeded highly viscous *Spergula sativa* of northern Europe suggests that it may occur in other parts of the Eastern States and Canada; and it is hoped that the foregoing notes derived largely from European sources may be of service to those who watch for the plant in America.

GRAY HERBARIUM.

¹ Journ. Bot. l. c. 17.

² Jour. Bot. xxix. 173-175 (1891).

³ Druce, Fl. Berks. 102 (1897).

THE Essex Institute of Salem, Massachusetts, has issued a notice of "meetings for the exhibition and study of Fungi" to be held at the Institute on July 17, August 29, September 5, 11, 18, and 25. These dates fall on Mondays, except September 5, which is Tuesday. "All who are interested in Edible and Poisonous Mushrooms are invited to attend, and to send for exhibition" any specimens that are complete and in a good state of preservation.

The committee in charge consists of Richards B. Macintosh, of Peabody, and Willis H. Ropes of Salem. Authorities on mushrooms are expected to speak at these meetings.

It is interesting to see others following the example set for a number of years by the Boston Mycological Club, whose exhibitions of named fungi are again this year a regular feature on Saturdays at Horticultural Hall from July to November.

SOME LITHOLOGICAL VARIATIONS OF RIBES.

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THE common gooseberry of eastern New England and the Maritime Provinces, *Ribes oxycanthoides*, L., is a more or less prickly shrub, with the mature fan-shaped leaves of the fertile branches mostly cuneate or truncate at base, dark green and glabrate above, light green and only slightly villous on the veins beneath. The species is common in the coastal district either in swamps or in dry or rocky soil, and it extends inland as a somewhat local shrub throughout New England, west beyond the Great Lakes, and north to Hudson Bay. Its greatest development is apparently in the coastal area from southern New England to Newfoundland and eastern New Brunswick. In the southern half of Gaspé Peninsula in eastern Quebec the common New England form of the plant is apparently very rare; extended explorations along the Baie des Chaleurs, eastward to Gaspé Basin, and inland from fifteen to thirty miles along the larger rivers, showing the shrub to be probably absent from the great calcareous region (Lower Carboniferous and Silurian) which extends over most of the county of Bonaventure and